DTE No. 04-____
Exhibit DM-3

NATIONAL GRID USA COMPANIES ENVIRONMENTAL PROCEDURE NO. 1 WASTE MANAGEMENT AND RECYCLING PROCEDURES MANUAL

Prepared by

National Grid USA Environmental Department
August 21, 2003

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FOREWORD

It is the policy of National Grid USA and its subsidiary companies to conduct our activities in a manner which meets all applicable laws and regulations as well as company policies and compliance objectives. The Waste Management and Recycling Procedures Manual has been developed in compliance with the National Grid USA's policy and presents procedures to ensure the proper management of wastes and recyclable materials including hazardous wastes, solid wastes, oils, polychlorinated biphenyls (PCBs) and electrical equipment. The manual is intended to assist the environmental staff and other employees in implementing the management procedures consistently throughout the company. The procedures have been developed in compliance with applicable Federal and state regulatory requirements.

T&D Environmental staff contributed to this document. It will be periodically updated when regulations or company policies or procedures change.

Questions or inquiries regarding information provided in this EP should be referred to the National Grid USA Environmental Department - Manager Licensing & Permitting

Approved by Joseph M. Kwasnik

Vice President Environmental

Record of Change

Date of Required Review:

Revision	Date	Description
1	December 2000	Editorial changes
2	September 2001	See Archive 1
3	October 2001	Corrected 4th Street Garage's EPA ID Number
4	December 2001	Moved Text 9.2.2 to 9.2.1
5	February 2002	Editorial pg 13-18
6	January 24,2003	Incorporate NY Requirements
7	June 23, 2003	Complete procedure review, moved training requirements to EP12
8	August 21, 2003	Chapter 4 – Stores code numbers added. Inclusion of personal computer and CRT concerning sale, disposal and damaged equipment to Chps. 7,10 & 11

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14.0 MANHOLE, VAULT AND SECONDARY CONTAINMENT PUMPING AND SOLIDS MANAGEMENT PROCEDURES

The pumping procedures described in this Chapter apply to Company underground manholes, underground vaults and outdoor secondary containment areas that contain water and require either pumping or other forms of oil removal prior to conducting maintenance or repair operations. Whenever oil is discovered in any of these areas, steps must be taken to avoid discharging oil into the environment.

Pump can be used when pumping out manholes and vaults which contain a small amount of oil (less than ½ inch). The pump boxes are designed with either 2", 3", or a combination of 2" and 3" quick disconnect hose connectors for water inlet and outlet hoses. Place oil absorbent pillows or pads in pump box prior to use. One bale of oil absorbent pillows will absorb 35 gallons of oil. The pump boxes can be used under certain conditions which are outlined in this chapter for company activities performed by National Grid USA employees. It should be noted that the pump boxes are not designed to pump sludge. Management of sludge and debris removed from underground structures that contain (or contained) lead covered cable is discussed in Section 14.4.

The procedures outlined in Sections 14.1 through 14.3 should be followed by Operations personnel who work in manholes or who may pump storm water from secondary containment areas. The procedures should be communicated to the appropriate personnel through classroom training, on-the-job training or by providing the procedures in writing. Additional procedures that must be followed by Narragansett Electric Company personnel are outlined in Section 14.2.

14.1 Pumping Procedures for Manholes and Vaults

Key points to remember when cleaning UG structures are:

- Wear tyvek suits, gloves, and tyvek boot covers.
- Wash hands and face prior to eating, drinking, or smoking.

Perform the following before discharging water from an underground manhole or vault to a catch basin or storm drain:

Prior to entry, inspect the manhole/vault for oil and other unusual conditions (i.e., gasoline, kerosene, odor, etc.). Try to estimate the amount of oil in the manhole/vault. According to the amount of oil discovered, follow the steps indicated.

14.1.1 Manhole Without a Transformer

In manholes which do not have oil-filled electrical equipment, any oil observed will likely not be from a National Grid US source. However, reporting requirements may still apply in Massachusetts if the oil in the manhole presents a Condition of Substantial Release Migration or an Imminent Hazard. Please refer to EP No. 5.

- **Sheen**
  - Place oil absorbent pads in manhole to absorb sheen. Remove pads and place in drum for disposal as hazardous waste (oily debris) according to Chapter 7, *Hazardous Waste Disposal.* In New York, the material may be disposed as non-hazardous waste (oily debris).
  - Pump water and proceed with maintenance.
- **Small Amount of Oil (Less Than Approximately ½ Inch)**
  - Pump water through a pump box filled with two mesh bags of oil-absorbent pillows or pads or other approved procedure. Observe discharge for visible signs of oil. If oil is observed, stop pumping and remove spent pillows. Place pillows in a drum for disposal. Add new pillows in pump box and proceed with pumping. NY has pumping options with out the use of pump boxes.
  - When pumping is complete, collect all absorbent materials for disposal as hazardous waste (oily debris) according to Chapter 7, *Hazardous Waste Disposal.*
- **Large Amount of Oil (Greater Than Approximately ½ Inch)**
  - If there is a large amount of water and oil, and it is an emergency situation, water may be pumped out of the manhole/vault to a point where it is low enough for employees to enter the manhole/vault in order to perform maintenance or repair of an electrical problem. If this procedure is performed, the mouth of the pump hose must be placed beneath the floating oil layer. Wait five minutes for the disturbed area to settle prior to commencing pumping activities.
  - Pump water through a pump box filled with two mesh bags of oil-absorbent pillows or pads. Observe discharge for visible signs of oil. If oil

is observed, stop pumping and remove spent pillows. Place pillows in a drum for disposal. Add new pillows in pump box and proceed with pumping.

- When pumping is complete, collect all absorbent materials for disposal as hazardous waste (oily debris) according to Chapter 7, *Hazardous Waste Disposal*.

- Once the emergency maintenance or repair has been completed, contact a Supervisor to determine the course of action. A cleanup contractor may be contacted to conduct waste removal.

- If a large amount of water and oil is discovered during routine maintenance activities, **DO NOT PUMP**. Contact a Supervisor to determine the course of action. A cleanup contractor may be contacted to conduct waste removal.

- If a cleanup contractor is contacted, notify the Environmental Engineer within 24 hours.

- If a cleanup contractor has pumped the manhole, also complete an in-house *Oil, Hazardous Substance and PCB Release Report Form* and submit report to the Environmental Engineer within 72 hours, if requested by the Environmental Engineer.

- **Unknown Amount of Oil**

  If the amount of oil in the manhole is unknown, proceed with above instructions for large amounts of oil in emergency situations until the amount of oil can be determined. Once the amount is determined, proceed with appropriate actions.

- **Unusual Conditions (i.e., sewage, unknown substances)**

  If unusual conditions are observed, **DO NOT PUMP**. Contact the Supervisor immediately to determine the course of action. The Supervisor must contact the Environmental Engineer for assistance.

14.1.2 Manhole/Vault With Oil-Filled Electrical Equipment (Transformers, Oil Switches, etc.)

National Grid USA personnel will not usually encounter oil containing concentrations of PCBs >50 ppm in manholes/vaults. The oil, though, may be found in oil-filled electrical equipment located in underground vaults. PCB-contaminated materials require special handling, labeling, and disposal. If the concentration is unknown (no labeling or no PCB screening test), treat the oil in the oil-filled electrical equipment as PCB-contaminated (50 ppm - 499 ppm). If treating the oil as PCB-contaminated, specific cleanup actions may be required regardless of whether the oil was released to the environment. Please refer to EP No. 5 Release Response for additional information. Contact the Supervisor or the Environmental Engineer if oil and/or oil-filled electrical equipment with unknown concentrations of PCBs must be handled and/or disposed.

The following steps must be followed whenever water and oil is discovered in a manhole or vault which contains oil-filled electrical equipment.

- Contact the Environmental Engineer. Specific actions may be required in response to either spills or releases to the environment. Please refer to EP No. 5 Release Response for further guidance.

- Regardless of the amount of water and oil, the water can be pumped out of the manhole/vault to a point where it is low enough for employees to enter the manhole/vault in order to perform maintenance or repair of an electrical problem. If this procedure is performed, the mouth of the pump hose must be placed beneath the floating oil layer. Wait five minutes for the disturbed area to settle prior to commencing pumping activities.

- Attempt to determine the PCB concentration of the transformer oil either by a label on the oil-filled electrical equipment or by a Clor-N-Oil screening test kit.

- If the oil is determined to be >50 ppm PCB, or remains unknown, **DO NOT PUMP OIL**. Contact the Supervisor. A cleanup contractor must be contacted to conduct waste removal.

- If a cleanup contractor has pumped the manhole, also complete an *Oil, Hazardous Substance and PCB Release Report Form* and submit the report to the Environmental Engineer within 72 hours, if requested by the Environmental Engineer.

- For disposal of oil-filled electrical equipment, refer to Chapter 13.

14.2 Additional Pumping Procedures for Manholes and Vaults - Narragansett Electric Company

In order to be in compliance with conditions of the wastewater discharge permit issued by the Narragansett Bay Commission (NBC), a checklist must be completed **BEFORE** water from an underground manhole or vault can be discharged to an NBC catch basin or storm drain within Narragansett Electric Company territory. An example of the checklist form, the *"Narragansett Electric Company Manhole and Vault Pumping Procedure"*, is provided as Figure 14.1. The checklist must be completed **PRIOR TO** each time a manhole or vault is pumped. The checklist form must be retained for three (3) years in the appropriate operating department's office.

Prior to pumping, the following procedures must be performed:

- During working hours, notify the NBC Pretreatment Program staff at (401) 222-3738.
- Should a manhole/vault need to be pumped during week nights or weekends, notify the NBC of the pumping operation the next working day.
- Record date and time of NBC notification.

In the event of an accidental discharge of oil to an NBC catch basin, the NBC must be notified of the incident immediately, and the Environmental Engineer must be notified **IMMEDIATELY**.

- NBC IPT Division - (401) 222-3738 (working hours)
- NBC IPT Division 24 Hour Emergency Hotline - (401) 222-6781 (non-working hours)

In addition to completing the checklist, a logbook must be kept summarizing all pumping activities. On a monthly basis, pumping activities must be summarized, using the "Narragansett Electric Company Vault/Manhole Pumping Log Summary Report" (Figure 14.2). The monthly summary report should be sent to the District Operations Manager's Office, who must forward the report to the NBC within 15 days following the end of each calendar month.

14.3 Pumping Procedures for Outdoor Secondary Containment Areas

The National Grid USA subsidiaries have outdoor storage areas for oil-filled equipment and above ground storage tanks which are contained within secondary containment areas. Outdoor secondary containment areas are typically bermed areas, sometimes with valved

drains, and therefore are subject to the accumulation of precipitation due to rainfall and snowfall. Prior to draining an outdoor secondary containment area of accumulated precipitation, the following steps must be performed.

- **Step 1:** Observe accumulated surface water. If oil is observed, determine the depth of the oil. If oil depth is greater than 1/4 inch, contact the Supervisor immediately to determine the course of action. A cleanup contractor may be contacted to conduct waste removal.

  If oil depth is less than 1/4 inch, contact the Designated Supervisor immediately, then continue with the next step.

  If no oil is observed in the containment area, continue to Step 4.

- **Step 2:** Determine source of the leak or spill. Once identified, take steps to stop the leak or spill. Continue to Step 3.

- **Step 3:** Once the leak or spill has ceased, remove oil from the surface water by placing oil-absorbent pads on the oil. Dispose of collected contaminated material as hazardous waste according to Chapter 7, or in NYS as non-hazardous waste if PCB contamination is less than 50ppm. Additional steps may be required to decontaminate the surfaces impacted by the spill. Please refer to EP No. 5 Release Response for additional guidance. Continue to Step 4.

- **Step 4:** Drain water from the containment area.

14.4 Management of Solids

This section describes how the sludge and debris removed from underground structures (e.g., manholes, underground vaults, and secondary containment areas) shall be managed to maintain compliance with hazardous waste management requirements. This section applies to all underground structures that contain (or contained) lead covered cable, when sludge, debris and soil are removed. This section does not apply to more recently constructed underground structures that contain only plastic- or rubber-covered cable, and never contained lead-covered cable.

Analysis of sludge samples taken from manholes in districts with older underground systems has shown that the majority of these samples fail the *Toxicity Characteristic Leaching Procedure* (TCLP) metals test for lead (e.g., exceeding the 5.0 ppm regulatory limit). Based on this information, sludge removed from underground structures will be managed as lead contaminated hazardous waste, unless the sludge passes the TCLP test for lead. Employees and contractors who remove sludge from underground structures

shall manage the sludge using the steps described in this section. A summary flowchart, Figure 14.3, has been developed for use by the Underground Department Supervisors.

If sludge is removed when cleaning underground structures, it may be placed in 55 gallon drums or 5 gallon plastic buckets (if the amount is less than 55 gallons) that are staged on the trucks. The 55 gallon drums should be brought to the facility's main accumulation area and labeled "Lead Contaminated Sludge" "Toxic" and dated. Sludge from the 5 gallon buckets shall be transferred to a drum in the department's underground satellite accumulation area. The drum should be labeled "Lead Contaminated Sludge" "Toxic". There can only be one drum of lead sludge in the satellite area.

In NYS, historical analysis of sludge samples from manholes in urban underground systems has shown that the majority of these samples are non-hazardous. A small percentage (~10-15%) have failed the TCLP lead test (5ppm) or PCBs ($\geq$ 50 ppm) or asbestos containing material (ACM) (>1%). Based on this information, the solids may be handled as non-hazardous waste, but must be containerized, sampled and analyzed for TCLP, PCBs and ACM. Based on the analysis, a final waste disposal determination will be made.

For more information regarding accumulation requirements, refer to Chapter 4.

- When classifying the sludge for disposal, the district has two management options.

Option 1:

Assume all the sludge is lead contaminated, and manage it as hazardous waste.

Option 2:

- Collect a composite sample of the sludge and arrange for a TCLP lead analysis. (The cost of a TCLP lead analysis is about $100.)

- The Underground Department will remove the sludge and label the drums as "oily debris" with the words "to be analyzed" marked on the drum. These drums shall be stored in the main hazardous waste accumulation area, and the labels dated, while waiting for the TCLP lead test results.

- The Environmental Engineer will collect (or have the disposal vendor collect) a composite sample of sludge from the drums, and arrange for TCLP lead analysis.

- Drums that pass the TCLP lead test (e.g., are below the 5.0 ppm regulatory limit for lead) shall be managed as "oily debris." The Environmental Engineer will work with Stores to remove the words "to be analyzed" from the drum.

- Drums that fail the TCLP lead test need new hazardous waste labels. The Environmental Engineer will work with Stores to remove the words "to be analyzed" from the drum, and add the new "lead contaminated sludge" label.
- NYS – Work with Divisional Environmental Engineer or Environmental Compliance Facilitator. In addition, analyze for PCBs and asbestos containing materials.

For roll-off container quantities of sludge (more than 10 drums) the Underground Supervisor shall work with the Environmental Engineer to determine sampling and disposal requirements.

The Environmental Engineer may choose to obtain a temporary EPA identification (ID) number to use for disposal of lead-contaminated sludge that is transported from the field directly to a hazardous waste treatment, storage, and disposal facility (TSDF).

Lead wastes (D008) and PCB wastes in NYS (B-series wastes) are restricted from land disposal, and require a land disposal restriction form along with the usual hazardous waste manifest. Refer to Chapters 5 and 6 for guidance regarding how to complete hazardous waste manifests land disposal restriction forms. Forms completed by the disposal vendor shall be reviewed and verified prior to signing.

Small pieces of lead cable and lead-contaminated PPE and rags should be placed in a drum and managed as "Lead Debris."

Larger pieces of lead sheath or cable should be recycled in bins located in the Stores Department. Any other debris in the underground structure that is contaminated with sludge (including pieces of wood, tyvek suits, tyvek boot covers, rubbish, etc.) should be placed in the drums along with the sludge. The lead-contaminated sludge waste is described in the waste profile as a black semi-solid oily sludge. This sludge is stabilized (mixed with Portland cement) prior to land disposal by the disposal vendor. For this reason, small amounts of oily liquids that separate from the sludge in the drum during storage do not need to be removed prior to shipment for disposal.

If the manhole contains primarily demolition type debris (e.g., bricks, concrete, wood) the debris - **but NOT the sludge** - may be managed as non-hazardous solid waste. Questionable mixtures, including asbestos-contaminated sludge, should be properly characterized prior to disposal by the Environmental Engineer.

Figure 14.1: Narragansett Electric Company Manhole and Vault Pumping Procedure

This procedure applies to all Narragansett Electric Company manholes and vaults containing water that require pumping prior to conducting maintenance or repair operations. This procedure must be followed before water from an underground vault or manhole can be discharged to Narragansett Bay Commission (NBC) facilities.

Complete the following check list upon arriving at a manhole or vault to be pumped:

STEP 1: Date/Time: _____
Location: _____
Name: _____

STEP 2: Is there oil-filled electrical equipment (transformer, switch, etc.) in the manhole/vault?
___Yes ____ No **IF NO, SKIP TO STEP 4**

STEP 3: Notify NBC Pretreatment Program staff (401) 222-3738.

Please Note: **Should NEC need to pump out a facility during week nights or weekends when NBC offices are closed, NEC shall notify NBC of the pumping operation the next working day.**

Date and Time of notification to NBC: _____

STEP 4: Inspect vault/manhole for the following, and record results:

L.E.L. Reading: _____
Visible Oil Present: _____
Unusual Odors: _____
Volume of Water in Vault/Manhole: _____
Signature: _____

IF OIL IS OBSERVED or unusual odors are detected, **DO NOT PUMP**. Contact your supervisor to determine course of action.

IF NO OIL IS OBSERVED, continue to next step.

STEP 5: Begin pumping wastewater through absorbent pads or pillows. Observe discharge for visible signs of oil.

IF OIL IS OBSERVED, STOP PUMPING and contact your supervisor.

IF NO OIL IS OBSERVED, continue to the next step.

STEP 6: When pumping is complete, collect all absorbent material for disposal. The absorbent material shall be disposed of as hazardous waste (oily debris).

STEP 7: Maintain this completed check list in the appropriate operating department's office for a period of 3 years.

Please Note: In the case of an accidental oil discharge to an NBC facility, notify the NBC of the incident **immediately** by calling the NBC's IPT Division at (401) 222-3738 or during non-working hours at its 24-Hour Emergency Hotline number, (401) 222-6781. Also, notify the Environmental Engineer of the incident **IMMEDIATELY**.

CLEANUP CONTRACTOR

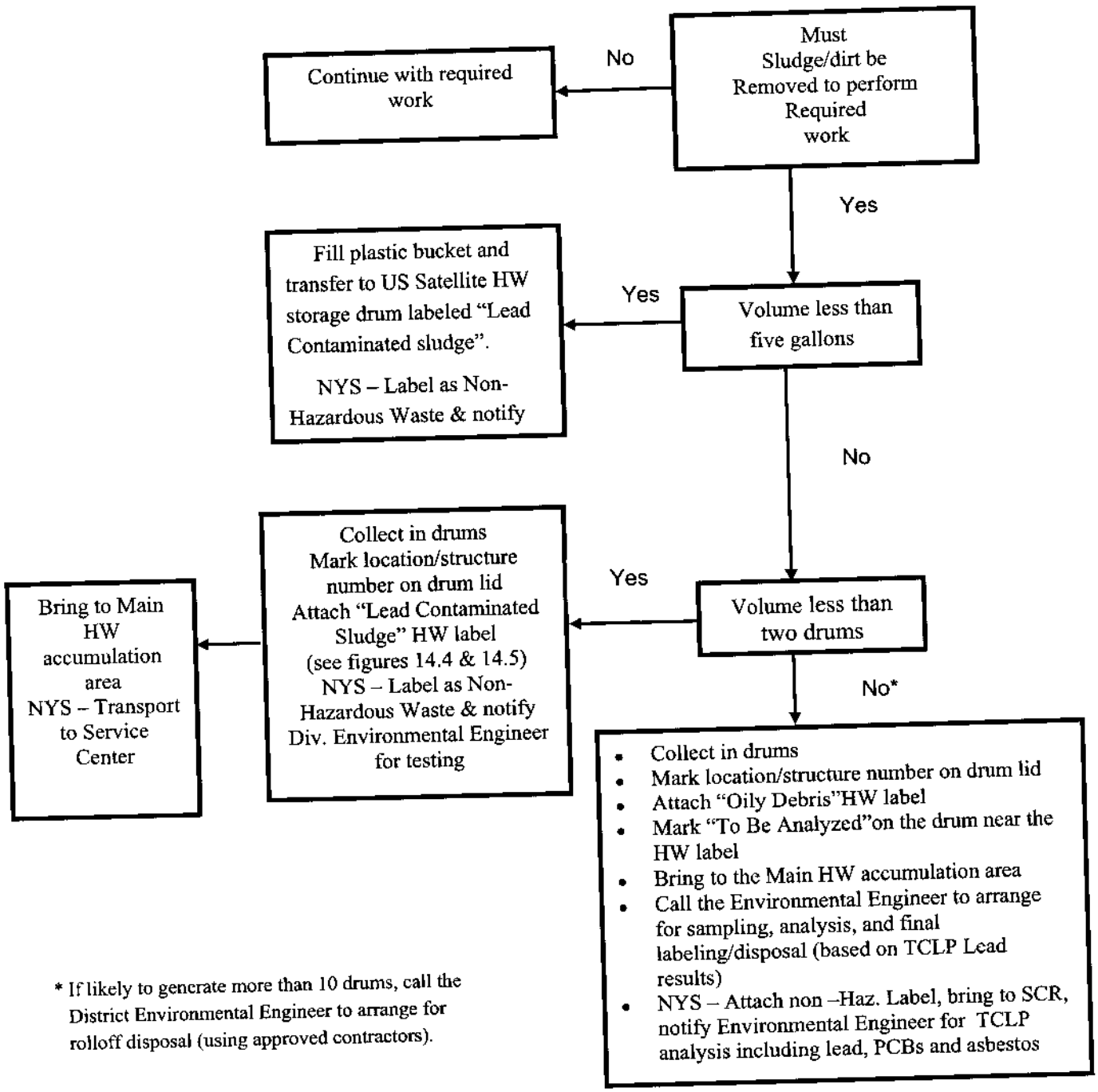
Clean Harbors, Inc. Providence, RI (401) 461-1300 Boston, MA (800) 645-8265

Figure 14.2: Narragansett Electric Company
Vault/Manhole Pumping Log Summary Report

Month of _____

Pumping Date	Street Location	Approximate Volume

Figure 14.3: UG Structure/Solids Cleaning Flowchart



* If likely to generate more than 10 drums, call the District Environmental Engineer to arrange for rolloff disposal (using approved contractors).

Figure 14.4: Sample Label for Lead Contaminated Solids Removed from Underground Structures in MA

MA Lead Contaminated Sludge Label

Use the red & white labels from Stores, Code 467238.

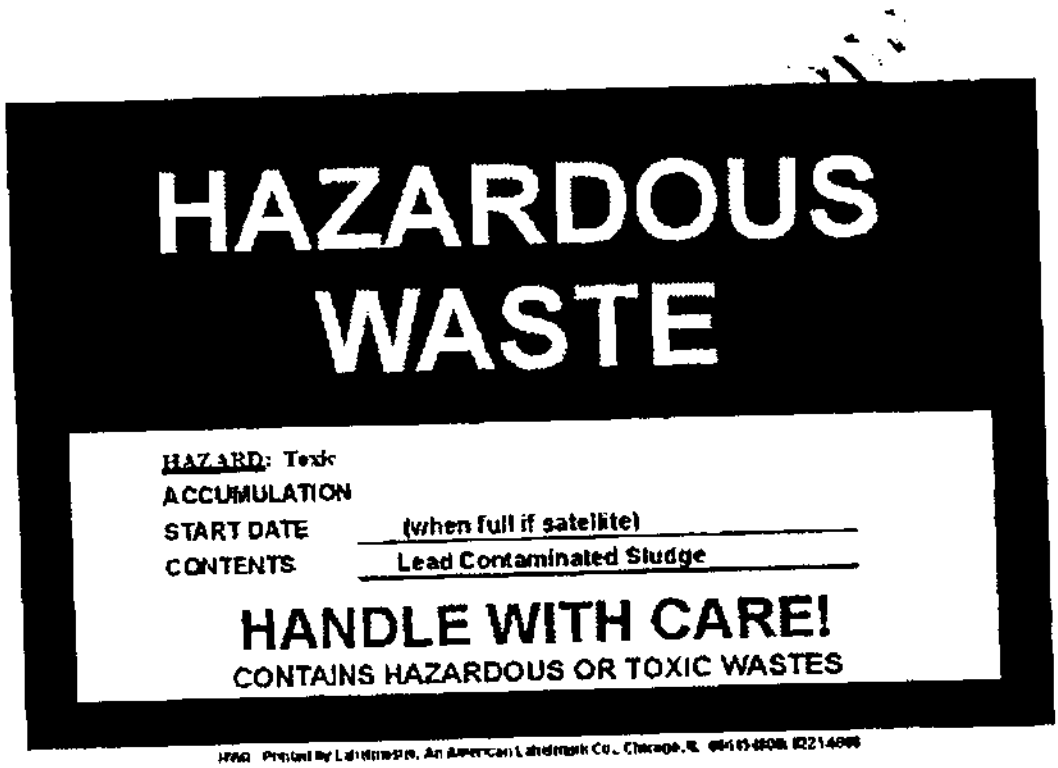


Figure 14.5: Sample Label for Lead Contaminated Solids Removed from Underground Structures in RI

RI Lead Contaminated Sludge Label

Use the yellow and white preprinted HW labels from Clean Harbors (Which include the warning statement required in RI).

U.S. D.O.T. SHIPPING DESCRIPTION
RQ, HAZARDOUS WASTE SOLID, N.O.S.
(LEAD), NA3077, PG III

9
HAZARD CLASS

HAZARDOUS WASTE

FEDERAL LAW PROHIBITS IMPROPER DISPOSAL
IF FOUND, CONTACT THE NEAREST POLICE, OR
PUBLIC SAFETY AUTHORITY, OR THE
U.S. ENVIRONMENTAL PROTECTION AGENCY

CAUTION

MANIFEST DOCUMENT #		ACCUMULATION START DATE	
GENERATOR: Narragansett Electric Co.			
ADDRESS: 280 Melrose Street			
CITY: Providence		STATE: RI	ZIP: 02907
EPA ID#: RID980523096	EPA HAZARD NAME: Toxic		
EPA WASTE #: D008.			
PROFILE #: S10164	DESCRIPTION: LEAD CONT. SLUDGE		CUST. CONTROL #

CAUTION

CONTAINS HAZARDOUS OR TOXIC WASTE

HAZARDOUS CONSTITUENTS

PART # HW300 REV 01 9/99

7.0 HAZARDOUS WASTE DISPOSAL

7.1 Importance of Ensuring Proper Disposal of Wastes

It is extremely important that hazardous wastes are disposed of in full compliance with federal and state laws and regulations. Failure to comply with these laws and regulations can result in improper disposal of hazardous wastes.

Proper disposal includes not only off-site disposal, but also proper on-site handling. Improper disposal can include storing hazardous waste on-site for longer than the allowed time limits (See Chapter 4), treating waste on-site in a manner not allowed by the regulations, shipment to unpermitted facilities, and other situations of potential risk. Also see Chapter 9 for information on mercury waste disposal, and Chapter 10 for recycling of waste oil.

7.2 Treatment of Hazardous Waste

Generators are only allowed to treat hazardous waste on-site under specific conditions. All treatment not performed in accordance with regulations is considered to be improper disposal of a hazardous waste. An example of allowable treatment is treatment of wastewater in a wastewater treatment unit provided the activity complies with all applicable permits and requirements.

Under federal regulations, characteristic wastes may be treated in 90-day tanks, containers, or containment buildings covered by 40 CFR Section 262.34(a), without a permit. If the waste thereafter no longer exhibits a hazardous characteristic, any further management of the waste is no longer subject to Subtitle C of RCRA. However, unless the waste was decharacterized within an agency-approved Area of Contamination, LDRs will still apply.

The following activities are generally not considered "treatment":

- Neutralization of caustic or corrosive wastes that are hazardous due to characteristic only;
- Gravity separation of oil from water, that is not a hazardous waste, including the addition of acid or base to bring about a better separation of an oil/water emulsion;
- Filtering of solids from an oily sludge or other non-hazardous component of an oil mixture; and,

- Addition of an absorbent (e.g., sawdust, speedi-dry, $CaCO_3$) in which a chemical reaction does not occur and the use of a gelation process or similar technique in which a chemical reaction does not occur, if such processes are done at the site of generation and are done solely for the purpose of making the waste more amenable to disposal at a hazardous waste facility.

A generator may think they are minimizing hazardous waste, but may actually be treating the waste. For example, although evaporation may minimize the amount of hazardous waste a generator is shipping off-site, it is actually considered to be treatment of a hazardous waste and would be improper disposal.

7.3 Company Personnel Responsible for Management of Hazardous Waste

Company employees are responsible for the proper management of hazardous waste, including proper handling, transporting and storage.

7.4 When Must a Hazardous Waste be Disposed

Hazardous wastes must be placed into transport for disposal within the time limits specified in Chapter 4.

7.5 Approved Hazardous Waste Disposal Facilities

Hazardous wastes generated by the National Grid USA subsidiaries shall be disposed of at disposal facilities which have been approved by the National Grid USA subsidiaries Waste Disposal Vendor Advisory Group. A list of Company-approved disposal facilities is shown on the Environmental Department's Web site on the Company's Infonet. For a complete description of the program see the EP No. 18, *Environmental Vendor Audits*.

7.6 Wastes Banned From Land Disposal

Nearly all EPA hazardous wastes (i.e., F, U, P, K and D wastes) are restricted from land disposal of any type, including disposal in landfills except under very strict conditions. See chapter 6 for EPA's Land Disposal Restriction regulations, 40 CFR 268. State-regulated wastes are not subject to these regulations unless they are also EPA hazardous wastes.

7.7 General Disposal Guidelines

Company sites generate different types of waste which are subject to different levels of regulation and different handling methods. Because of this, it is important that different waste types be accumulated in separate containers. Segregating waste in separate

containers helps ensure that wastes are managed in compliance with applicable regulations and can help reduce disposal costs and liabilities. For example, if a container is labeled as containing waste non-PCB MODF, no other waste type may be added to the container.

7.8 Disposal of PCB Wastes

PCB wastes are regulated for disposal by the EPA through the TSCA Regulations. The TSCA regulations require PCBs to be disposed of only at chemical waste landfills (solids) and incinerators (solids and liquids) permitted by EPA for the disposal of PCBs.

7.9 Disposal Site Audit Program

Environmental audits are conducted of all current and potential hazardous waste disposal facilities used by the National Grid USA subsidiaries. The audits determine whether the disposal facility is in compliance with applicable Federal and state environmental regulations and minimum company requirements for the receipt, tracking and disposal of company wastes.

Audits consist of a disposal facility visit, completion of a comprehensive audit questionnaire, and development of a recommendation for use of the disposal facility.

Current disposal facilities are audited on a regular basis with potential disposal facilities audited as the need for additional disposal facilities are identified.

The details of the audit program are provided in EP No. 18, *Environmental Vendor Audits*.

7.10 Disposal of On-Site Vendor Generated Wastes

As discussed in 5.10, vendor-generated wastes may be managed in various manners depending upon the classification of the facility and the quantity of wastes being generated. In all cases, the following conditions apply:

- The vendor shall provide to the Environmental Engineer a list of the anticipated wastes and quantities requiring disposal prior to beginning the vendor on-site activities. The list shall also have attached MSDSs for each chemical product to be used on site.
- All wastes anticipated to be generated by a vendor at a company site shall be pre-approved by the Environmental Engineer.

- All waste labeling, waste packaging, and transport manifests shall be in accordance with company policies and procedures as inspected, approved, and signed (manifest) by the Environmental Engineer prior to placing the waste into transport for disposal. The transport manifest(s) shall identify the company location as the generator site and utilize the location's permanent or temporary EPA ID number on the manifest.

- All unused chemicals (non-waste) and/or products originally brought to the company location by the outside vendor will remain the responsibility of the vendor and be removed by the vendor from the company location at the conclusion of the vendor's on-site activities.

- All wastes must be disposed of at a National Grid USA approved hazardous waste disposal facility. Refer to the Environmental Department's web site on the company's Infonet for a listing of approved disposal facilities.

7.11 Recycling of Scrap Metal

Because of the potential for National Grid USA scrap metal to contain oils, PCBs or lead, the company has developed a list of vendors approved to recycle National Grid USA scrap metal. Refer to the Environmental Department's web site on the company's Infonet for a listing of approved scrap metal facilities.

All junk oil-filled electrical equipment shall be disposed or recycled at a National Grid USA approved hazardous waste disposal facility. Oil-filled equipment shall not be sent to scrap metal recyclers, even if the equipment has been drained.

In an effort to limit potential liability associated with the unrestricted shipment and ultimate processing of lead-sheathed copper cable, only those facilities indicated as approved for lead cable may receive National Grid USA SCRAP lead cable.

7.12 Personal Computers and Monitors

Personal computers (PCs) and monitors (CRTs) do not present either a physical or health hazard during normal use. In the rare circumstance of broken glass on a CRT, hazardous waste could be generated. Some CRT manufacturers MSD sheets show lead oxide as high as 20-30%. If the lead were all leachable, a TCLP result could yield 8,800 mg/l of lead from a 20% lead oxide sample. The regulatory toxicity characteristic limit for lead is 5 mg/l (TCLP).

For assistance in cleanup, contact the company's Industrial Hygienist for consultation. A HEPA vac and air sampling may be required due to volatilized lead and/or mercury from the non-intact CRT."

National Grid USA Companies

Environmental Procedure No. 5

Release Response

Prepared by

National Grid USA Environmental Department

3/31/03

FOREWORD

It is the Policy of National Grid USA and its subsidiaries to conduct its activities to meet all environmental laws and regulations as well as company policies and procedures. This Environmental Procedure (EP) No. 5, Release Response, documents the system put in place at National Grid USA to respond to releases of oil and/or hazardous material (OHM) in Massachusetts, New Hampshire, New York, Rhode Island and Vermont. In addition to defining regulatory reporting requirements in each state, this EP establishes standard operating procedures for activities conducted in response to OHM releases. Standardization of these release response actions will ensure the defensibility of analytical results generated at spill cleanup sites and maintain a consistent approach throughout the various operating companies of National Grid USA.

Questions or inquiries regarding information provided in this EP should be referred to the National Grid USA Environmental Department - Manager, Licensing & Permitting.

Approved by: Joseph M. Kwasnik
Vice President, Environmental

Record of Change

Date of Review/Revision:

Revision	Date	Description
0	02/12/01	Initial Issuance
1	4/05/01	Minor revisions to Ch. 2, 3, 4 & 5
2	12/4/01	See Archive
3	7/25/02	See Archive
4	3/31/03	Addition of New York Requirements

National Grid

1.0 INTRODUCTION

Electrical generation, transmission and distribution operations may utilize oil and/or hazardous materials (OHM) in various applications, the most common of which is the use of oil-filled equipment. Releases of OHM are regulated on both a state and federal level depending upon the material released and may require notification to the applicable regulator(s) and the conduct of response actions when "knowledge" of a release condition is obtained. The most common release conditions which require regulatory notification and response actions include:

- Exceedance of a Reportable Quantity (RQ) within 24 hours
- Exceedance of a Reportable Concentration (RC)
- Releases into groundwater or which result in a sheen on surface water

The objective of this Environmental Procedure (EP) is to ensure that spill response activities conducted by National Grid are compliant with the applicable regulations and consistent throughout all of National Grid US's operating companies.

2.0 GENERAL SPILL RESPONSE GUIDANCE

Although further information may be found throughout various chapters of this EP, the following guidance is provided for specific release conditions commonly encountered by the electric utility industry.

2.1 Historic Staining

During the course of normal operations, minor releases of oil, less than the applicable RQ's, may occur over many years. These minor releases typically do not require regulatory notification in accordance with an RQ exceedance since a sudden release of OHM has not occurred within 24 hours. However, cleanup activities may still be required due to either an RC exceedance, unauthorized disposal of PCBs, or unauthorized use of solid surfaces that have been in contact with PCBs. Please refer to section 2.3 of this chapter as well as chapter 5 of this EP for further discussion of spills, unauthorized disposal and authorized uses of PCBs.

The requirement to conduct response actions is based upon the obtaining of "knowledge" of a release during the conduct of routine work activities. There is no requirement to actively search for release sites. However, when personnel become aware of staining of either soil or solid surfaces, this may be considered to constitute "knowledge".

2.1.1 Decommissioned Substations

Release response actions conducted at decommissioned substations will be conducted in accordance with EP 17 Decommissioning Substations.

2.1.2 Active Electrical Substations and Other Active Operating Areas

For active electrical substations and other active operating areas where knowledge of a release is obtained, response actions potentially including regulatory notifications shall be conducted if both of the following conditions are true:

1. Assessment and remediation activities can be conducted safely.

   The evaluation of whether this is possible should at a minimum include:
   a) Does any nearby electrical equipment or electrical lines (underground or overhead) present a potential risk to safety?
   b) If so, is it feasible to de-energize the equipment. Electrical equipment or lines should not be de-energized if doing so could potentially compromise the distribution of electricity to customers.

   If the work cannot be conducted in a safe manner, the response actions should not be undertaken.

2. One of the following conditions exists:
   - Oil-filled equipment is actively leaking. In this case, response actions should be coordinated with either O&M or Engineering to repair the leaking equipment.
   - Stains are observed that can reasonably be associated with equipment containing > 49 ppm PCBs. Please note that there is no minimum size for responding to releases/spills from equipment containing > 49 ppm PCBs.
   - Stains are observed which have a surface area of > 17 square feet of impacted soil and/or traprock and can not be reasonably associated with equipment containing > 49 ppm PCBs. By conservatively assuming a 3 foot depth of impact, a total volume of impacted soil of 51 cubic feet (1.9 cubic yards) is estimated. Massachusetts regulations state that < 2 cubic yards of soil with RC exceedances are

exempt from notification and from cleanup unless the contamination poses an unacceptable risk. National Grid is utilizing this volume (2 cubic yards) as the threshold to define releases which are considered significant.

Provided that the work can be performed safely, releases not meeting the criteria defined in condition 2 may be addressed at the discretion of the Environmental Engineer, if in the opinion of the Environmental Engineer the release poses an unacceptable risk of harm to human health, public welfare, safety or the environment. In New York, all spills must be reported within 2 hours. Volume is not a criteria.

Guidance on conducting response actions and completing regulatory notifications is provided in the following chapters:

Chapter 1	Massachusetts requirements
Chapter 2	New Hampshire requirements
Chapter 3	Rhode Island requirements
Chapter 4	Vermont requirements
Chapter 5	Federal requirements regarding PCBs
Chapter 19	New York requirements

2.2 Releases to Manholes and Vaults

National Grid may be required to conduct response actions in electrical manholes and vaults in response to releases of oil from oil-filled electrical equipment or the discovery of an oil sheen on accumulated water in the manhole/vault. Often times, the presence of an oil sheen on accumulated stormwater within the manhole/vault is associated with roadway runoff and not related to National Grid's operations. EP 1 Waste Management, chapter 14 provides procedures for managing accumulated stormwater in manholes. The purpose of this section is to provide guidance on regulatory notifications.

2.2.1 Regulatory Requirements

In Massachusetts, 310 CMR 40.0317(19) provides an exemption to the regulatory notification requirements if the release is completely contained within the manhole/vault. The Department of Environmental Protection (DEP) has also produced a Q&A to provide additional guidance. In this guidance, the DEP states that

notification is required if:

- The vault is not designed, built, and maintained to be hydraulically tight;
- The vault is of unknown integrity or has a floor drain, dirt floor, or is otherwise incapable of containing the release;
- The release poses an Imminent Hazard, such as a release involving smoke/fire/explosion; or
- Separate-phase oil is migrating into the vault from an external source (thus constituting a condition of Substantial Release Migration)

In New Hampshire, Env-Ws 412 requires reporting of a discharge of oil above the RQ to the Department of Environmental Services (DES). The definition of discharge includes "the release or addition of any oil to land, groundwater, surface water or subsurface utility".

In New York, Article 12 of the Navigation Law applies to petroleum releases. Section 172 defines "discharge" as any release, spill, leak, etc. into the water of the state or onto land from which it might flow into water of the state.

In Rhode Island, the Oil Pollution Control regulations apply to releases which may enter the waters of the state. Therefore, a release of oil which is contained within a manhole/vault does not apply. The Remediation Regulation's definition of a release exempts any Release that is completely contained within an area or structure designed and engineered to contain such materials.

In Vermont, the Hazardous Waste Regulations define a release as "any intentional or unintentional action or omission resulting in the spilling, leaking, pumping, pouring, emitting, emptying, dumping, or disposing of hazardous materials into the surface or groundwaters, or onto the lands in the state, or into waters outside the jurisdiction of the state when damage may result to the public health, lands, waters or natural resources within the jurisdiction of the state".

2.2.2 Reporting of Releases to Manholes/Vaults

In accordance with the above-mentioned regulations, National

Grid Company personnel shall utilize the following guidance to determine whether regulatory notification is exempted. Please note that in the event that regulatory notification is not required, response actions to cleanup the spill may still be required (it is only an exemption to notification).

Massachusetts

Regulatory notification shall be made in the following instances:

- The flow of separate-phase oil (not a sheen) into the vault from an external source. This constitutes a 72 hour notification condition and is a condition of Substantial Release Migration.
- When, utilizing their professional judgment, National Grid Company personnel believe that the manhole/vault is incapable of completely containing the release. Instances of this incapability include:
  - Release to a dirt floor or earthen sump within the manhole/vault
  - Release to a manhole/vault which is in communication with groundwater

In the event that the manhole/vault is judged to be capable of containing the release and therefore reporting of the release is not performed, a notation documenting why notification was not performed shall be made on the National Grid *Oil, Hazardous Substance and PCB Release Report Form.*

New York

There is an obligation to report a spill unless it can be demonstrated that the following two conditions can both be met:

1) There is absolutely no potential to enter groundwater through soil or gravel surface or to come in contact with surface water, drainage ditches or other conveyance; and,
2) Immediate and complete cleanup measures are carried out.

Rhode Island

Regulatory notification shall be made in the event that, utilizing their professional judgment, the National Grid Company personnel believe that the manhole/vault is incapable of completely containing the release. Instances of this incapability include:

- Release to a dirt floor or earthen sump with the manhole/vault,

- Release to a manhole/vault which is in communication with groundwater

In the event that the manhole/vault is judged to be capable of containing the release and therefore reporting of the release is not performed, a notation documenting why notification was not performed shall be made on the National Grid *Oil, Hazardous Substance and PCB Release Report Form.*

New Hampshire and Vermont
All releases above the RQ's shall be reported to the appropriate regulatory agencies regardless of the ability of the manhole/vault to contain the release.

2.3 PCB Spills

Although further discussed in chapter 5, additional guidance is provided here for responding to PCB spills and PCB releases to the environment

Within TSCA, 761.20(a) states that no person shall utilize any PCB or PCB item other than in a totally enclosed manner. Authorizations for utilizing PCBs in various uses is found in 761.30, including the authorization for use in electrical equipment. This authorization is found in 761.30(a) while authorizations for use of porous surfaces and other decontaminated structures and equipment is found in 761.30(p) and 761.30(u) respectively.

These authorizations for porous surfaces and decontaminated equipment and structures are required when the TSCA definition of a spill is considered. TSCA defines a spill as follows:

> "Spill means both intentional and unintentional spills, leaks, and other uncontrolled discharges where the release results in any quantity of PCBs running off or about to run off the external surface of the equipment or other PCB source…."

This definition does not incorporate an RQ nor does it require contamination of the "environment". Therefore, a spill of oil containing PCBs in excess of 50 ppm to any surface or environmental media will require specific actions since the PCBs are no longer totally enclosed and not authorized for use. Please refer to Chapter 5 for details on the response options available.